

What is claimed is:

1. A method of printing a data file on a printer comprising the steps of:  
5 receiving the data file in a stream of data from a content source external to the printer;  
gathering a first portion of data from the stream;  
printing the first portion while continuing to receive the stream;  
gathering a second portion of data from the stream; and  
printing the second portion after printing the first portion.
2. The method of printing of claim 1, wherein the step of gathering a second portion is started during the step of printing the first portion.
- 15 3. The method of printing of claim 1, further comprising the step of determining a block size of the first portion of the data.
- 20 4. The method of printing of claim 3, wherein the step of determining a block size further comprises the steps of:  
pinging the content source to calculate a data transfer speed; and  
adjusting the block size based upon the data transfer speed.
- 25 5. The method of printing of claim 4, wherein the step of adjusting the block size further comprises the steps of:  
if the data transfer speed is a first speed, setting a first block size;  
and  
if the data transfer speed is a second speed greater than the first speed, setting a second block size larger than the first block size.
- 30 6. The method of printing of claim 1, further comprising the step of storing the second portion of the file in a memory source prior to the step of printing the second portion.

~~7. The method of printing of claim 6, further comprising the step of retrieving the second portion from the memory source after the step of printing the first portion.~~

5       8. The method of printing of claim 1, wherein the step of receiving a first portion of the file from a content source further comprises the step of downloading the first portion from a server via an Internet communications system.

10      9. The method of printing of claim 1, further comprising the steps of: after the step of gathering the second portion of data, if all data from the data file has not been received from the content source, then:

15                  gathering at least one additional portion of data from the stream;  
and  
printing the at least one additional portion of data.

20      10. A method of printing a data file on a printer comprising the steps of: receiving a first portion of the file from a content source external to the printer;  
printing the first portion;  
receiving a second portion of the file from the content source during the step of printing the first portion; and  
printing the second portion after printing the first portion.

25      11. The method of printing of claim 10, further comprising the step of determining a block size of the first portion of the file.

30      12. The method of printing of claim 11, wherein the step of determining a block size further comprises the steps of:  
pinging the content source to calculate a data transfer speed; and  
adjusting the block size based upon the data transfer speed.

13. The method of printing of claim 12, wherein the step of adjusting the block size further comprises the steps of:  
if the data transfer speed is a first speed, the setting a first block size; and  
if the data transfer speed is a second speed greater than the first speed, then setting a second block larger than the first block size.
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14. The method of printing of claim 10, further comprising the step of storing the second portion of the file in a memory source prior to the step of printing the second portion.
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15. The method of printing of claim 14, further comprising the step of retrieving the second portion from the memory source after the step of printing the first portion.
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16. The method of printing of claim 10, wherein the step of receiving a first portion of the file from a content source further comprises the step of downloading the first portion from a server via an Internet communications system.
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17. The method of printing of claim 10, further comprising the steps of:  
after the step of receiving the second portion of data, if all data from the data file has not been received from the content source, then:  
receiving at least one additional portion of data from the stream;  
and  
printing the at least one additional portion of data.
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18. A method of printing a data file on a client system, the data file residing on a content source remote from the client system,  
comprising the steps of:  
partitioning the data file into a plurality of portions on the content source;
- 30

~~transferring a first portion of the plurality of portions from the content source to the client system;~~  
~~printing the first portion;~~  
~~transferring a second portion of the plurality of portions from the content source to the client system; and~~  
~~printing the second portion after printing the first portion.~~

5           19. The method of printing of claim 18, further comprising the step of determining a block size of the first portion of the data file.

10          20. The method of printing of claim 19, wherein the step of determining a block size further comprises the steps of:  
                  pinging the client system to calculate a data transfer speed; and  
                  adjusting the block size based upon the data transfer speed.

15          21. The method of printing of claim 20, wherein the step of adjusting the block size further comprises the steps of:  
                  if the data transfer speed is less than a first speed, then setting a first block size; and  
                  if the data transfer speed is greater than the first speed, then setting a second block size larger than the first block size.

20          22. The method of printing of claim 18, further comprising the step of storing the second portion of the file in a memory source on the client system prior to the step of printing the second portion.

25          23. The method of printing of claim 22, further comprising the step of retrieving the second portion from the memory source after the step of printing the first portion.

30          24. The method of printing of claim 18, wherein the step of transferring a first portion of the data file to the client system further comprises

~~the step of downloading the first portion from the content source via an Internet communications system.~~

- 5        25. The method of printing of claim 18, further comprising the steps of:  
            after the step of transferring the second portion of data, if all data  
            from the data file has not been transferred to the client system,  
            then:

10        transferring at least one additional portion of data to the client  
            system; and

            printing the at least one additional portion of data.

- 15        26. A computer program product for printing a data file on a printer  
            comprising:

            code that receives the data file in a stream of data from a content  
            source external to the printer;

            code that gathers a first portion of data from the stream;

20        code that sends the first portion to the printer while continuing to  
            receive the stream;

            code that gathers a second portion of the data from the stream  
            while the first portion is being printed; and

            code that sends the second portion to the printer after the first  
            portion is printed.

- 25        27. The computer program product of claim 26, further comprising code  
            that determines a block size of the first portion of data.

- 30        28. The computer program product of claim 27, wherein the code that  
            determines a block size further comprises:

            code that pings the content source to calculate a data transfer  
            speed; and

            code that adjusts the block size based upon the data transfer  
            speed.

- [Handwritten signature]*
29. The computer program product of claim 28, wherein the code that  
adjusts the block size further comprises:  
code that sets a first block size if the data transfer speed is a first  
speed; and  
code that sets a second block size larger than the first block size if  
the data transfer speed is a second speed greater than the first  
speed.
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30. The computer program product of claim 26, further comprising code  
that stores the second portion of the data in a memory source prior  
to printing the second portion.
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31. The computer program product of claim 30, further comprising code  
that retrieves the second portion from the memory source after the  
first portion is printed.
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32. The computer program product of claim 26, further comprising code  
that downloads the first portion from a server via an Internet  
communications system.
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33. The computer program product of claim 26, further comprising:  
code that determines if all data from the data file has been  
received from the content source;  
code that gathers at least one additional portion of data from the  
stream when all data from the data file has not been received; and  
code that sends the at least one additional portion of data to the  
printer.
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